Robert Shade 3210 North Broad Street Philadelphia, PA. 19140-5008

UPDATE MAGAZINE C/O FRANK & CAROL DAVIS P.O. BOX 1075 PERU, IN 46970

8/12/94

Dear Frank & Carol:

Enclosed is my check for \$ 20.00 as payment in full for the following product.

QUAN. ITEM AMOUNT

1 - PAYROLL PROGRAM DISK \$ 20.00

TOTAL \$ 20.00

Please supply the PAYROLL program on a LARKEN formatted, 5.25 in., double sided, 360 KB floppy disk.

If the enclosed amount is not correct, please remit by check, or bill me, as I do not accept C.O.D. orders.

Enclosed is my SPECTRUM GAMES SPECIAL SERIES COLLECTION disk # S1, CASTLES. This disk has six great castle based games on it. These games are 1-AVENGER, 2-FAIRLIGHT, 3-KNIGHT LORE, 4-CASTLE MASTER, 5-THE CRYPT & 6-KNIGHTMARE. All these games use the KEMPSTON joystick. Castle Master and The Crypt use FREESCAPE to provide a 3D view in every direction you select with the joystick. I have used a MC routine, from George Chambers, so that the NMI + "F" key will reload the AUTOSTART menu from any game. With some games, Castle Master & The Crypt, for instance, you may have to repeat the NMI + "F" key operation two or more times. When you select FAIRLIGHT let it completely load before

taking any action. Then you will be looking at a screen showing the use of the keyboard keys. To be able to use the KEMPSTON joystick press the "9" key and hold it down for several seconds. If you do not hold the "9" key down long enough you will only be able to use the keyboard to play the game. Have fun with these best of the best SPECTRUM games. Let me know if you are interested in any other such best of the best SPECTRUM games disks and I will send you a catalog.

I have enclosed a copy of my 1994, LOOMIS-SHADE PHOTOGRAPHY price catalog. This catalog was produced with the WORDMASTER / TYPELINER programs. The graphics files were developed with the ART STUDIO program. I used the ART STUDIO program rather than the HEADLINER program because I am used to using the ART STUDIO program and it is far more versatile than HEADLINER. The only part of the catalog that is not printed through WORDMASTER is the PROFESSIONAL PHOTOGRAPHERS SOCIETY OF AMERICA logo. I started by digitizing the logo with the S.M.U.G. video board, software, and a B&W video camera but gave it up due to the large amount of retouching needed to clean up the logo. Well it is 99 % WORDMASTER. Let me know what you think of my efforts.

I have enclosed a disk with LARKEN extended BASIC demos on it. These demos show where I am now with respect to the use of the LARKEN extended BASIC windows and screen handling functions.

On the second disk is a more recent and sophisticated general purpose LARKEN extended BASIC demo which I developed for mu "LABELMAKER II" program upgrade project. There are two lookalike three section (window) screen display demos. The three section (window) screen display format of these new demos resembles that of the "FILMRECORDER" demo, I wrote a few years ago, so it is easy to compare how many improvments have been added to this newer version. The first of these two demos is a real three LARKEN window demo, each LARKEN window is set to the size of the screen display section, just like the "FILMRECORDER" demo. The second is a pseudo three window demo, this demo uses one LARKEN window for the whole screen display which includes all three sections of the screen display. Both demos load a predrawn screen\$ which contains the three section (window) screen display. Each of the sections (windows) is a different color, has borders, fixed underlines and titles etc.. Each demo has direct data entry. Each screen position where there is an item requiring data entry is highlighted one item at a time sequentially. When the user moves the highlight to the item he needs to enter data into, and presses the "E" key the highlight is removed and a cursor provided so that data entry can commence. The two PRINT #0 lines are used to provide window handling or data entry options menus. The new menu options that provide for these improved data entry operations are the following: 1-WINDOW TO WINDOW SHIFT, 2-NEXT / PRIOR ITEM SHIFT , 3-ITEM CHANGE (SELECT FROM A SET OF FIXED CONSTANTS), 4-ENTER DATA (START DATA ENTERY AT THE HIGHLIGHTED POSITION), 5-FINISH

(TO CONCLUDE DATA ENTRY PER FILE UNIT) & 6-QUIT (GOTO THE MAIN OPTIONS MENU). The real difference between the two demos is the typing speed. More than half the data entry routine is in MC. I first tried to compile the complete data entry routine but the LARKEN extended BASIC functions refused to work properly after they were compiled. The end product is a data entry routine that is part in MC and part in BASIC. It is the part of the data entry routine that is in BASIC, the LARKEN extended BASIC functions, that makes the difference in tuping speed. The first demo's maximum typing speed is slow, only slightly better than PRO/FILE, while the second demo's typing speed is first rate. The better tuping speed of the second demo is due to the shortening of the LARKEN extended BASIC data entry routine due to the removal of all the lines for printing to two additional windows. The second demo's core of subroutines is also shortened by the elimination of all the LARKEN extended BASIC lines used for window #0 (PRINT #5) and window #1 (PRINT #6). The core routines line numbers for the remaining lines are the same so the programmer can use the same catalog of core routines lines listings. The MC part of the data entry routine is the same for both the real and pseudo three window demos. The data entry routines used with these demo's is superior to the "FILMRECORDER" data entry routine. This new and improved data entry routine provides for three modes of data entry. These modes are 1-ALL CHARACTERS (upper and lower case, numbers, punction and symbols - pressing "CS" + "2" key alternatly shifts the cursor from "C" to "L"), 2-CAPITALS ONLY (all characters except lower case characters) & 3-NUMBERS ONLY (no characters except 0-9). Each of the sections (windows) is preset by the implementation program to a different mode. The upper left section is set to ALL CHARACTERS, the upper right section to CAPITOLS mode and the bottom section to NUMBERS mode. Press "ENTER" when data entry at an item is completed and the data entry cursor is erased and the highlight is placed over the next item. Each of the data entry operations produces a different tone. The tone for the "C" to "L" cursor is the hightest frequency tone, the character typed tone is lower, and the "ENTER" to end data entery at that item is the lowest. This new data entry routine just as the older version has two sister routines that see to it that no less than 0 characters are left after a delete or more then the preset total are entered. The new data entry routine uses the standard "CS" + "0" for character delete. This new data entry routine still does not provide an insert mode and locks out the arrow keys. I had considered and had tested an insert function for this new version but the fact that with the LARKEN extended basic functions slowing down the whole data entry routine so much I gave up on having an insert function with this version. Pressing the "CHANGE" function will change the business name "LOOMIS-SHADE PHOTOGRAPHY" to "LINDA SHADE PHOTOGRAPHY" and the "AM" to "PM" for the time of day entry and back again when each is highlighted. This demo has a complete date and time of day checking and error reporting routine. The WINDOW to WINDOW SHIFT function will cause the highlight at any item in any section (window) to shift to the first item in the next section (window). The "NEXT or PRIOR ITEM" function moves the hightlight from item to item only within a section (window) in up or down

direction with wraparound. Pressing the "FINISH" function at any time allows the user to add any amount of data desired from a blank file to a fully entered file. The "FINISH" function will first prompt "IS ALL THIS DATA CORRECT 'Y' OR 'N'". If "N" is pressed the user can return to change or enter data into anu item entry. If "Y" is pressed that concludes data entry into that file unit and "ANOTHER FILE UNIT 'Y' OR 'N'" prompt will appear. If "Y" is pressed this will clear all the entries for the last file unit from the display and setup the next file unit for data entry. If "N" is pressed the data entry operation is ended and the program will display the main options menu. The "QUIT" function provides an immediate escape from the data entry operation to the main options menu at any time. One of the most important improvements to this demo is the far more extensive core of subroutines, the MC components and use of HI-RAM memory to temporarily store data entered. The fonts used by this demo are new and improved as well. All the characters in all these fonts center properly within the TIMEX attribute color (paper) block they are printed into. There are five fonts used by these demos, the same number of fonts used by the older "FILMRECORDER" demo. These five fonts are 1-LARKEN 64 CHARACTER (for data entry), 2-LARKEN ITALIC (for printing our company name to the screen on simulated labels), 3-LARKEN 42 CHARACTER (printing titles within the windows), 4-TIMEX 32 CHARACTER BOLD (titles & menus) & 5-TIMEX GRAPHICS (borbers, frames, constructs, simutated tractor-feed sheets & labels). Even though the LARKEN ITALIC font has been improved it still suffers from the problem of not being able to start the next character at the bottom of the line before the end of the previous character at the top of the line. This produces a line which is readable, but slightly wider than desirable. Because the primary use of this font is to print our individual and company names to the screen display as simulated labels and record pages, the font has been divided into two halfs to provide two ways of printing those names. The first half of the LARKEN ITALIC font only provides numbers, punction, capitol letters and some symbols, to be printed as individual stand alone characters. The second part is lower case characters which have been designed to print somewhat more sucinct versions of our individual and company names. This is done by designing the whole line of characters so close together that most of the 8 x 8 character blocks have more than one character per block. If for instance the LARKEN ITALIC font was selected, you could print my company's name to the screen display by either PRINT #7; "LOOMIS-SHADE PHOTOGRAPHY" or PRINT #7; "mnopqrstefghijkl". The second screen print would not be as wide, but both are OK. The LARKEN 64 character font is loaded into the LARKEN cartridge. The LARKEN 64 character font is the font used for the data entry routine. The LARKEN 64 character font also provides three mode cursors. It provides an inverse "C" & "L" for the standard upper & lower case characters printing and an inverse right facing arrow cursor for numbers only data entry. I selected the standard font characters to be converted for use as cursor characters because I felt they were the least used and least missed. These were the underline, character code 95, for the inverse "C" cursor, the up arrow, character code 94 for the inverse "L" cursor and the back-slash character code 92 for the inverse right-facing arrow cursor.

These three selectable modes simplify data entry. A numbers only mode entry does not need a separate routine to ascertain if letter, punction or symbol characters have been entered into a date or time of day entry by mistake. This new data entry routine allows the extended mode characters to be entered in all characters or caps mode. By pressing "SS" & the "Y", "U", "P", "F" or "G" keys the user can print the extended mode brackets and copyright symbol to the screen. Not all these 5 fonts are used in the three section (window) screen displays so I have included two other demos that use all the fonts and graphics. The first of these extra demos is the font demo which presents one font at a time with its type and file name along with the standard TIMEX ROM font for comparison of use. The second extra demo is the graphics demo and uses primarily the TIMEX GRAPHICS font to produce borders, frames & constructs. Each main screen display is labeled and some of the dozens of screen displays are titles and colored. In the graphics demo there are several displays which are used to preview data printouts, these are the tractor-feed labels and pages. Other graphics displays are for the production of cover screens, such as horizontal and verticle film strips. Check them out for yourself. To faciltate your running all these new demos on disk #2 I have eliminated the usual DELETE / MERGE operations and saved the demo implementation routines along with the core subroutines. I have placed a "MENU.B1" program on disk #2 to load each of them individually and each demo has a return to the disk menu to make viewing them all a little easier. The old "FILMRECORDER" demo did have fonts in HI-RAM but did not have any MC program blocks in HI-RAM. These three section (window) screen display demos do have some MC program blocks in HI-RAM. These include Jack Dohany's LARKEN DISK UTILITY, 255 bytes, and Jack Dohany's THE BREAK UTILITY, 80 bytes, my PRIMARY DATA ENTRY ROUTINE, 1399 bytes, and my DATA STORAGE BUFFER CLEARING ROUTINE, 65 bytes. I have enclosed a copy of the memory map of memory usage above ramtop, a copy of the core subroutines catalog listing, a copy of the substitution chart for the extended mode characters, a flow chart and a list of the router variable used in the LARKEN extended BASIC part of the data entry routine, copies of the fonts demo displays and a few variables usage listings for your convenience. If the user programmer needed more RAM space for an implemenation program data string he could delete as many of the lines from the core subroutine as needed and that would still provide all the GOSUB's to get the job done. If the core subroutines line numbers were not changed the user / programmer could still use the same catalog of core subroutines listing as before. The core subroutines could be reinstated with a DELETE/MERGE from the end of the implementation segment before the next implementation segment was itself MERGED into the program. Drive these demos around, kick their tires and let me know what you think of them.

Thank you in advance for your prompt processing of this order. Please keep in touch. Write or call from time to time.

Respectfully

Robert Shade